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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/672,980	09/26/2003	Laurent Denoue	FXPL-01061US0 (FX/A2005)	3512
23910 7590 03/04/2009				
FLIESLER MEYER LLP 650 CALIFORNIA STREET 14TH FLOOR SAN FRANCISCO, CA 94108				
EXAMINER				
TANK, ANDREW L				
ART UNIT		PAPER NUMBER		
2175				
MAIL DATE		DELIVERY MODE		
03/04/2009		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/672,980

Applicant(s)

DENOUE ET AL.

Examiner

Andrew Tank

Art Unit

2175

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 November 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-40 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SE/US)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

This action is responsive to the Amendments filed November 20, 2008. Claims 1-3, 13, 20, 23-26, 30, 34 and 38-40 have been directly amended. Claims 1-40 are pending and have been considered below.

Status of Claims

Claims 1-40 are pending in the case. Claims 1, 24, 25, 26, 30, 31, 34, 38, 39 and 40 are the independent Claims.
Claims 1-40 remain rejected under 35 U.S.C. 103(a).

Information Disclosure Statement Acknowledgement and Objection

The information disclosure statement objection of August 20, 2008, is hereby withdrawn.

Claim Rejections - 35 USC § 112

Applicant has successfully amended claims 2, 3, 20, and 34-36 to overcome the indefinite claims rejections of August 20, 2008. The corresponding rejections are withdrawn.

Claim Rejections - 35 USC § 101

Applicant has successfully amended claim 38 to overcome the non-statutory rejection of August 20, 2008. The corresponding rejection is withdrawn.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-13, 15-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over R. Douglas Riecken, "Adaptive Direct Manipulation", IEEE, 1991, Vol. 2, pages 1115-1120, previously presented as "Riecken", in view of Nelson (US PGPUB 2004/0008635), previously presented as "Nelson".

Regarding Claim 1, Riecken discloses the claimed aspect of a method for displaying a representation of content (page 1115 paragraph 3: "a prototyped GUI system which is adaptive to user performance"), comprising: monitoring user behavior (pages 1119 paragraph 1: "While monitoring user interactions") while interacting with a first representation of content (pages 1116 paragraph 2: "when a system initially presents its interactive graphical objects"; the initial presentation is a first representation); determining interaction information from the user behavior (page 1119 paragraph 1: "KS applies statistical inference to determine if modifications in user behavior have occurred"); maintaining the interaction information (page 1119 paragraph 2: "KS computers and logs the button dialogue behavior"); and deforming a second representation of content using the interaction information (page 1119 paragraph 5: "then all the KSs will collaborate to construct a new layout for the button matrix"); and displaying the second representation of content (page 1119 paragraph 5: "then all the KSs will collaborate to construct a new layout for the button matrix", page 1118 paragraph 2: "The display manager KS manages and posts to the blackboard all graphical events presented to the user"), wherein a first display condition of a first display area where the first representation is displayed is different from a

second display condition of a second display area where the second representation is displayed (page 1119 paragraph 5: “If the error rate (defined by the spatial variance KS) of button selections increases above a system defined threshold (current value is 3%), then all the KSs will collaborate to construct a new layout for the button matrix.”).

While Riecken does not teach explicitly the claimed aspect of digital content, Riecken does disclose graphical objects (page 1118 paragraph 2: “each active graphical object”). Applicant should duly note that graphical objects could be digital content. Even if not, Nelson discloses the claimed aspect of digital content in a multi-participant conference system with controllable content. (Nelson, Abstract, FIG.14 shows mixed modes of digital content displayed concurrently). It would be obvious to one of ordinary skill in the art at the time of the invention to expand Riecken's layout based on user behavior concept to include Nelson's digital content. One would have been motivated to make this expansion to allow the collaborative blackboard of Riecken to include forms of content other than graphical objects, providing for a richer user experience, as suggested by Nelson ([0011]).

Regarding Claim 2, most of the limitations have been met in the rejection of Claim 1. See details for Claim 1 rejection. Riecken further discloses wherein deforming a second representation includes deforming an active area of the second representation (page 1118 paragraph 2: “each active graphical object”, page 1117 paragraph 1: “have their color changed”).

Regarding Claim 3, most of the limitations have been met in the rejection of Claim 1. See details for Claim 1 rejection. Riecken further discloses wherein deforming a second

representation includes deforming a layout of the second representation (page 1117 paragraph 2: “their horizontal spacing may vary slightly”).

Regarding Claim 4, most of the limitations have been met in the rejection of Claim 1. See details for Claim 1 rejection. Riecken further discloses the claimed aspect of the first and second representation are of the same content (page 1117 paragraph 2; the button matrix changes in appearance, but the content delivered, that of the buttons, does not change, i.e. remains the same).

Regarding Claim 5, most of the limitations have been met in the rejection of Claim 4. See details for Claim 4 rejection. Nelson further discloses the claimed aspect of the digital content is at least one of a web page, a digital document, a digital image, an electronic book, a digital slide, and a graphical user interface, wherein a graphical user interface and plurality of participants (audio/video stream for each participant) conferencing environment are provided (Abstract, [0003], [0005]).

Regarding Claim 6, most of the limitations have been met in the rejection of Claim 1. See details for Claim 1 rejection. Riecken further discloses the claimed aspect of the second representation is scaled in relation to the first representation (page 1117 paragraph 2: “but their horizontal spacing may vary slightly.”).

Regarding Claims 7 and 8, most of the limitations have been met in the rejection of Claim 1. See details for Claim 1 rejection. Nelson discloses the claimed aspect of the first representation is a representation of first digital content and the second representation is a representation of second digital content and first representation is a representation of a first graphical user interface and the second representation is a representation of a second graphical user interface (Nelson Fig. 8: different participants view different layout of the graphical representation with digital content).

Regarding Claims 9, most of the limitations have been met in the rejection of Claim 1. See details for Claim 1 rejection. Riecken discloses the claimed aspect of monitoring user behavior while interacting with the first representation comprises: monitoring user interaction with the first representation of digital content (page 1119 paragraph 1: "While monitoring user interactions"); and determining interaction areas from the user interaction with the first representation (page 1119 paragraph 1: "within a given area").

Regarding Claim 10, most of the limitations have been met in the rejection of Claim 9. See details for Claim 9 rejection. Riecken further discloses the claimed aspect of evaluating user interaction with the interaction areas (page 1116 paragraph 6: "buttons are selected by a user to initiate system actions").

Regarding Claim 11, most of the limitations have been met in the rejection of Claim 1. See details for Claim 1 rejection. The rejection for Claim 5 applies to Claim 11. See rejection details for Claim 5.

Regarding Claim 12, most of the limitations have been met in the rejection of Claim 1. See details for Claim 1 rejection. Riecken further discloses the claimed aspect of maintaining the interaction information includes maintaining the interaction information with an identification of the content from which the interaction information was determined (page 1118 paragraph 2: “a graphical object identifier (name)”, page 1119 paragraph 2: “KS computes and logs the button dialogue behavior of the user”).

Regarding Claim 13, most of the limitations have been met in the rejection of Claim 9. See details for Claim 9 rejection. Riecken further discloses the claimed aspect of deforming the second representation comprises: determining interaction areas of the second representation corresponding to the first representation; deforming the corresponding interaction areas (page 1117 paragraph 2: color changes for the corresponding interaction areas).

Regarding Claim 15, most of the limitations have been met in the rejection of Claim 1. See details for Claim 1 rejection. Nelson further discloses the claimed aspect wherein deforming the second representation includes applying an animation to areas of the second representation using

the interaction information (Abstract, FIG. 7, FIG. 8: video content is displayed as one of a multitude of digital contents).

Regarding Claim 16, most of the limitations have been met in the rejection of Claim 1. See details for Claim 1 rejection. Riecken further discloses the claimed aspect of determining interaction information from the user behavior includes determining a degree of interaction with at least one area of the first representation (page 1119 paragraph 2: "frequency and recency of user button dialogue").

Regarding Claim 17, most of the limitations have been met in the rejection of Claim 1. See details for Claim 1 rejection. Riecken further discloses the claimed aspect of determining interaction information from the user behavior includes determining a sequence of interaction with the first representation (page 1119 paragraph 2: "frequency and recency of user button dialogue").

Regarding Claim 18, most of the limitations have been met in the rejection of Claim 17. See details for Claim 17 rejection. Riecken further discloses the claimed aspect of determining a sequence of interaction with the first representation, comprises: determining an order in which interaction areas of the first representation are selected (page 1119 paragraph 2: "recency of user button dialogue").

Regarding Claim 19, most of the limitations have been met in the rejection of Claim 1. See details for Claim 1 rejection. Riecken does not specifically teach the claimed aspect of first representation is not deformed when deforming the second representation. However, Nelson discloses the claimed aspect of different layouts for each participant, it would be obvious to one of ordinary skill in the art at the time of the to keep the original version of the graphical user interface as well, because this would allow the user to go back to the original default layout.

Regarding Claim 20, most of the limitations have been met in the rejection of Claim 1. See details for Claim 1 rejection. Riecken further discloses the claimed aspect of the first and second representation are representations of the same content, and wherein: the second representation is deformed without modifying the content (page 1117 paragraph 2; the button matrix changes in appearance, but the content delivered, that of the buttons, does not change, i.e. remains the same).

Regarding Claim 21, most of the limitations have been met in the rejection of Claim 1. See details for Claim 1 rejection. Riecken discloses the claimed aspect of maintaining the interaction information comprises storing the interaction information at at least one of a client-side device, a server, and a proxy server (page 1119 paragraph 2: "spatial variance KS computes and logs", page 1117 paragraph 3: "the ADM system is designed and implemented using AI blackboard technologies [...] provided by a set of blackboard knowledge sources (KS)", page 1116 paragraph

5: "In designing and implementing the ADM system [...] a physical interface based on touch screen technologies was developed"; client device).

Regarding Claim 22, most of the limitations have been met in the rejection of Claims 4 and 1. See details for Claims 4 and 1 rejection. Riecken further discloses the claimed aspect of maintaining the interaction information comprises: adding the interaction information to a file containing data for the content (page 1119 paragraph 2: "KS computes and logs the button dialogue behavior", page 1119 paragraph 3: "descriptive features of variance [...] include: general changes in the physical location [...] geometry defining the size and shape [...] spatial relationship between a set of buttons [...] qualification and quantification of touches to the button", page 1118 paragraph 2: "a graphical object identifier").

Regarding Claim 23, most of the limitations have been met in the rejection of Claim 1. See details for Claim 1 rejection. Riecken further discloses the claimed aspect of monitoring a user's behavior including highlighting a textual passage of content or selecting a portion of an image or document (page 1119 paragraph 3: "general changes in the physical location (cluster of pixel points) within each button area where the user is touching"; selection of a portion of an image). Nelson further discloses the claimed aspect of monitoring user behavior while interacting with a first representation of digital content comprises monitoring a first user's behavior while interacting with the first representation; and deforming a second representation of digital content using the interaction information comprises deforming a second representation presented to a

second user (FIG. 15: wherein user activity is monitored 224, FIG. 8: wherein different interface layout is illustrated for each user).

Regarding Claim 24, most of the limitations have been met in the rejection of Claim 1. See rejection details for Claim 1. Riecken further discloses wherein user behavior includes how often or how many times an area is interacted with or in what order a user interacts with the area (page 1117 paragraph 2: "based on the frequency in which a user touches a 'user preferred' target location within the buttons", page 1119 paragraph 2: "both the frequency and recency of user button dialogue").

Regarding Claim 25, the rejection for Claims 1, 2 and 9 apply to Claim 25. See rejection details for Claims 1, 2 and 9.

Regarding Claim 26, the rejection for Claims 1 and 9 apply to Claim 26. See rejection details for Claims 1 and 9. Riecken further discloses identifying an interaction area determined to be of interest using observed user interaction which includes how often or how many times an interaction area is selected (page 1117 paragraph 2: "based on the frequency in which a user touches a 'user preferred' target location within the buttons").

Regarding Claim 27, most of the limitations have been met in the rejection of Claim 26. See details for Claim 26 rejection. The rejection of claim 9 applies to Claim 27. See rejection details for Claim 9.

Regarding Claim 28, most of the limitations have been met in the rejection of Claim 26. See details for Claim 26 rejection. The rejection for Claim 1 applies to Claim 28. See rejection details for Claim 1.

Regarding Claim 29, most of the limitations have been met in the rejection of Claim 28. See details for Claim 28 rejection. The rejection for Claim 5 applies to Claim 29. See rejection details for Claim 5.

Regarding Claim 30, most of the limitations have been met in the rejection of Claim 1. See details for Claim 1 rejection. Riecken further discloses that the user behavior includes how often or how many times an area of the first representation is interacted with or in what order a user interacts with the area (page 1117 paragraph 2: "Performance evaluation (by which the system functions) is based on the frequency in which a user touches a 'user preferred' target location within the buttons with specific fingers (excluding the thumb).").

Regarding Claim 31, the rejection for Claims 1, 2, 3, and 11 apply to Claim 31. See rejection details for Claims 1, 2, 3 and 11.

Regarding Claim 32, most of the limitations have been met in the rejection of Claim 31. See details for Claim 31 rejection. The rejection for Claims 1 and 13 apply to Claim 32. See rejection details for Claims 1 and 13.

Regarding Claim 33, most of the limitations have been met in the rejection of Claim 31. See details for Claim 31 rejection. The rejection for Claim 5 applies to Claim 33. See rejection details for Claim 5.

Regarding Claim 34, the rejection for Claims 1, 2 and 3 apply to Claim 34. See rejection details for Claims 1, 2 and 3.

Regarding Claims 35 and 36, most of the limitations have been met in the rejection of Claim 34. See details for Claim 34 rejection. The rejection for Claims 12 and 13 apply to Claim 35. See rejection details for Claims 12 and 13.

Regarding Claim 37, most of the limitations have been met in the rejection of Claim 36. See details for Claim 36 rejection. The rejection for Claim 20 applies to Claim 37. See rejection details for Claim 20.

Regarding Claim 38, the rejection for Claims 1, 2 and 3 apply to Claim 38. See rejection details for Claims 1, 2 and 3.

Regarding Claim 39, the rejection for Claims 1, 2 and 3 apply to Claim 39. See rejection details for Claims 1, 2 and 3.

Regarding Claim 40, the rejection for Claims 1, 2 and 3 apply to Claim 40. See rejection details for Claims 1, 2 and 3.

Claims 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Riecken in view of Nelson and in further view of Robertson, "The Task Gallery: A 3 D Window Manager", CHI 2000, April 1-6 2000, previously presented as "Robertson".

Regarding Claim 14, most of the limitations have been met in the rejection of Claim 13. See details for Claim 13 rejection. Riecken does not disclose the claimed aspect of deforming the corresponding interaction areas includes at least one of enlarging the interaction areas, applying a fisheye perspective to the interaction areas, and zooming the interaction areas. Nelson discloses the claimed aspect of zooming the interaction areas (FIG. 13). Riecken and Nelson do not teach the claimed aspect of fisheye effect. Robertson discloses the claimed aspect of a fish-eye effect (FIG. 1: wherein fisheye effect is illustrated). It would be obvious to one of ordinary skill in the art at the time of the invention to simply substitute the fisheye effect of Robertson for the zooming effect of Riecken's layout manipulation and Nelson's digital content delivery system, yielding the predictable result of applying a fisheye perspective to interaction areas.

Response to Arguments

Applicant's arguments filed November 20, 2008, have been fully considered but they are not persuasive.

Nelson Reference

Applicant alleges (page 12) that the previously presented Nelson reference does not qualify as either a 102 or 103 prior art reference. The Examiner respectfully disagrees. The instant application was filed September 26, 2003. Nelson was published as a PG-PUB on January 15, 2004, and was filed at the USPTO July 10, 2002. Nelson clearly qualifies as a prior art reference under USC 102(e):

“(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed

in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.”

Claims 1 and 24

Applicant has requested (page 12) more specific citations of Riecken regarding the limitations of claim 1. Applicant is kindly directed to the rejection of claim 1 above.

Applicant alleges (pages 12-13) that Riecken does not disclose, teach or suggest maintaining interaction information or deforming a second representation based on the interaction information. The Examiner respectfully disagrees and kindly directs Applicant to the rejection of claim 1 above.

Claim 30

Applicant alleges (page 13) that neither Riecken nor Nelson teach or suggest the limitations of claim 30. The Examiner respectfully disagrees and kindly directs Applicant to the rejection of claim 30 above.

Claim 2

Applicant alleges (page 13-14) that Riecken does not teach or suggest an “active area”. The Examiner respectfully disagrees. The “active graphical objects” of Riecken are clearly active areas (page 1118 paragraph 2: “active graphical object”).

In response to applicant's argument that the reference fails to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., Figure 5(b), paragraphs of the specification, Applicant's ‘active area’ not being limited to ‘two-dimensional area’ physically touched by the user) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Claim 3

Applicant alleges (page 14) that Riecken does not teach or suggest a "layout". The Examiner respectfully disagrees. Riecken clearly provides for a layout (page 1117 paragraph 2: "adjusting the button matrix layout") which is deformed (page 1117 paragraph 2: "their horizontal spacing may vary slightly").

In response to applicant's argument that the reference fails to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., layout deforming examples from the specification) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Claims 4 and 20

Applicant alleges (page 15) that neither Riecken nor Nelson teaches or suggests the first and second representation are of the same content and the second representation is deformed without modifying the content. The Examiner respectfully disagrees. As shown in the rejection of claim 4 above, Riecken teaches the modification of a presentation of content, as such, the content itself is the same, and the representation is deformed without modifying the content.

Claim 5

Applicant alleges (page 15) that Nelson is not a valid prior art reference and therefore claim 5 was not obvious at the time the present invention was made. Nelson has previously been determined as a prior art reference and the argument is not persuasive.

Claim 6

Applicant alleges (page 15) that neither Riecken nor Nelson teach or disclose “wherein the second representation is scaled in relation to the first representation”. The Examiner respectfully disagrees. Riecken clearly teaches modifying the horizontal spacing, thereby scaling the second representation (page 1117 paragraph 2: “but their horizontal spacing may vary slightly.”).

Claims 7 and 8

Applicant alleges (pages 15-16) that that Nelson is not a valid prior art reference and therefore claims 7 and 8 were not obvious at the time the present invention was made. Nelson has previously been determined as a prior art reference and the argument is not persuasive.

Claims 9, 25 and 27

Applicant alleges (page 16) that the 'physical layout' of 'interactive graphical objects' is not the same concept as Applicant's 'interaction areas'. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., examples and definitions for 'interaction areas' from the specification) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Claim 10

Applicant alleges (page 17) that that Nelson is not a valid prior art reference and therefore claim 10 was not obvious at the time the present invention was made. Nelson has previously been determined as a prior art reference and the argument is not persuasive.

Claim 11

Applicant alleges (page 17) that that Nelson is not a valid prior art reference and therefore claim 11 was not obvious at the time the present invention was made. Nelson has previously been determined as a prior art reference and the argument is not persuasive.

Claim 12

Applicant alleges (pages 17-18) that Riecken does not teach or suggest storing and therefore does not teach or suggest “maintaining the interaction information with identification of the digital content from which the interaction information was determined.” The Examiner respectfully disagrees. Riecken discloses that each interaction area has a unique identifier (page 1118 paragraph 2: “a graphical object identifier”). Further, Riecken discloses that the user interactions with the active areas are computed and logged by the KS system, i.e. maintained.

Claim 13

Applicant alleges (page 18) that Riecken does not teach or suggest either determining interaction areas of the second representation corresponding to the first representation or deforming the corresponding interaction areas. The Examiner respectfully disagrees and kindly directs Applicant to the rejection of claim 13 above.

Claim 26

Applicant alleges (pages 18-19) that Riecken does not teach or suggest “identifying an interaction area determined to be of interest using observed user interaction which includes how often or how many times an interaction area is selected”. The Examiner respectfully disagrees. Riecken discloses that the frequency a user interacts with a target area is used in determining the area as interesting (page 1117 paragraph 2: “based on the frequency in which a user touches a ‘user preferred’ target location within the buttons”).

Claim 15

Applicant alleges (page 19) that that Nelson is not a valid prior art reference and therefore claim 15 was not obvious at the time the present invention was made. Nelson has previously been determined as a prior art reference and the argument is not persuasive.

Claim 16

Applicant alleges (page 19) that that Nelson is not a valid prior art reference and therefore claim 16 was not obvious at the time the present invention was made. Nelson has previously been determined as a prior art reference and the argument is not persuasive.

Claim 17

Applicant alleges (page 19) that that Nelson is not a valid prior art reference and therefore claim 17 was not obvious at the time the present invention was made. Nelson has previously been determined as a prior art reference and the argument is not persuasive.

Claim 18

Applicant alleges (page 20) that the Examiner does not explain the motivation for rearranging the user interface accordingly for efficient reasons. The Examiner notes that on closer inspection of Riecken, Riecken does disclose the limitation of "determining an order in which interaction areas of the first representation are selected." The argument is therefore moot.

Claim 19

Applicant alleges (page 20) that that Nelson is not a valid prior art reference and therefore claim 19 was not obvious at the time the present invention was made. Nelson has previously been determined as a prior art reference and the argument is not persuasive.

Claim 20

Applicant alleges (page 20) that that Nelson is not a valid prior art reference and therefore claim 20 was not obvious at the time the present invention was made. Nelson has previously been determined as a prior art reference and the argument is not persuasive.

Claim 21

Applicant alleges (page 21) that Riecken does not teach or suggest storing the interaction information at at least one of a client-side device, a server, and a proxy server. The Examiner respectfully disagrees. The ADM system is a physical touch screen device which contains the AI blackboard logic, which in turn stores and logs the interactions. As this device is interacted with by a user, the device is a client-side device. The argument is not persuasive.

Claim 22

Applicant alleges (page 21) that Riecken does not teach or suggest adding interaction information to a file containing data for the digital content. The Examiner respectfully disagrees. The interaction information is logged by the spatial variance KS and a description of the variance features is stored along with the area/content identification. The argument is not persuasive.

Claim 23

Applicant alleges (page 22) that that Nelson is not a valid prior art reference and therefore claim 23 was not obvious at the time the present invention was made. Nelson has previously been determined as a prior art reference and the argument is not persuasive.

Claims 31, 34 and 38-40

Applicant alleges (page 22) that that Nelson is not a valid prior art reference and therefore claim 31, 34 and 38-40 were not obvious at the time the present invention was made.

Nelson has previously been determined as a prior art reference and the argument is not persuasive.

Claims 24-29, 32, 33 and 35-37

Applicant alleges (page 22) that that Nelson is not a valid prior art reference and therefore claim 24-29, 32, 33 and 35-37 were not obvious at the time the present invention was made. Nelson has previously been determined as a prior art reference and the argument is not persuasive.

Claim 14

Applicant alleges (page 23) that that Nelson is not a valid prior art reference and therefore claim 14 was not obvious at the time the present invention was made. Nelson has previously been determined as a prior art reference and the argument is not persuasive.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew Tank whose telephone number is 571-270-1692. The examiner can normally be reached on Mon - Thur 0830-1700 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Bashore can be reached on 571-272-4088. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/A. T./
Examiner, Art Unit 2175
March 2, 2009

/William L. Bashore/
Supervisory Patent Examiner, Art Unit 2175